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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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BROWN, COURTNEY A

ART UNIT	PAPER NUMBER
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1616

NOTIFICATION DATE	DELIVERY MODE
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12/17/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/521,755	<b>Applicant(s)</b> TAKAHASHI ET AL.	
	<b>Examiner</b> COURTNEY BROWN	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/4/09</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Acknowledgement of Receipt/Status of Claims***

This Office Action is in response to the amendment filed April 27, 2009 and August 5, 2009. Claims **1-22 and 24-31** are pending in the application. Claim 23 has been cancelled. Claims 2 and 3 have been withdrawn as being directed to a non-elected invention. Claims 1 has been amended. Claims 1, 4-22 and 24-31 are being examined for patentability.

Applicant's arguments, see pages 14-19, filed April 27, 2009, with respect to the rejection(s) of claims 1, 4-7, 9, 10, and 21 on the ground of nonstatutory obviousness-type double patenting, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is set forth below.

Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

### **New Rejection(s)**

#### ***Double Patenting***

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4-7, 9, 10, and 16-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-13 of copending Application No. 11/948,542. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly claimed subject matter embraces or is embraced by the co-pending application 11/948,542.

The copending application recites the same composition comprising an isoxazoline derivative represented by the compound of formula (I) and an additional herbicidal active compound and at least one compound selected from the group consisting of atrazine, cyanazine, simazine, prometryn, glyphosate, glufosinate, linuron, flumetsulam, isoxaflutol, mesitrione, diflufenican, pendimethalin and flumioxazin. The difference between the invention of the instant application and co-pending application

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11/948,542 is that the instant invention does not specifically teach a composition comprising at least 4 herbicidal active components as in co-pending application 11/948542. However, the instant claims disclose the compound of instant formula I and at least one other herbicidal active. Thus, the instant claims encompass additional active compounds. In addition, it is known in the art that combining herbicides increase the efficacy of a herbicide such that the maximum level of control or growth regulation for a given application rate of a herbicide is increased, or alternatively, the application rate of a herbicide giving optimum control or growth regulation can be reduced. Additionally, according to MPEP 2111.03 [R-3], the transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. Hence, the use of "comprising" language in the instant claims would allow for the inclusion of additional herbicidal components.

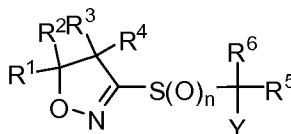
Another difference between the invention of the instant application and that of co-pending application 11/948,542 is that the instant invention does not specifically claim the use of 3-[(5-difluoromethoxy-1-methyl-3-trifluoromethylpyrazol-4-yl)methylsulfonyl]-4,5-dihydro-5,5-dimethylisoxazole as claimed in co-pending 11/948,542. The claims differ from the instant application by reciting specific species and a more limited genus than the co-pending application 11/948,542. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to select any of the species of the genus taught by instant claim 1 because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar

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properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus of instant claim 1 since such compound would have been suggested by the reference as a whole.

From this extensive overlap of subject matter, one of ordinary skill in the art would recognize that the same product is taught in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



**Compound of formula (I)**

### ***Examiner's Response to Applicant's Remarks***

Applicant's arguments, filed April 27, 2009 with respect to the rejection of claims 1, 4-7, 9, 10, and 21 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2-6, and 15-17 of copending Application No. 11/948,542 have been considered but are moot in view of the new ground(s) of rejection.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

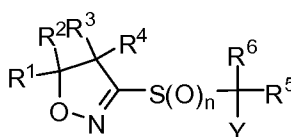
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1, 4-22 and 24-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani et al. (US Patent 7,238,689 B2, cited in the Office Action mailed 1/26/09) in view of Plant et al. (WO 2006/024820 A1).**

### ***Applicant's Invention***

Applicant claims a herbicidal composition which comprises i) an isoxazoline derivative represented by the following general formula (I) or a salt



### **Compound of formula (I)**

wherein R<sup>1</sup> and R<sup>2</sup> are independently a hydrogen atom, a C1 to C10 alkyl group, a C3 to C8 cycloalkyl group or a C3 to C8 cycloalkyl C1 to C3 alkyl group; or R<sup>1</sup> and R<sup>2</sup> may be bonded to each other to form a C3 to C7 spiro ring together with the carbon atoms to which they bond; R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a C1 to C10 alkyl group or a C3 to C8 cycloalkyl group; or R<sup>3</sup> and R<sup>4</sup> may be bonded to each other to form a C3 to C7 spiro ring together with the carbon atoms to which they bond; or R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> may form a 5- to 8- membered ring together with the carbon atoms to which they bond; R<sup>5</sup> and R<sup>6</sup> are independently a hydrogen atom or a C 1 to C 10 alkyl group; Y is a 5- to 6-membered aromatic heterocyclic group or condensed aromatic heterocyclic group having one or more hetero atoms selected from a nitrogen atom, an oxygen atom and a sulfur atom; the heterocyclic group may be substituted with 0 to 6



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same or different groups selected from the following substituent group when the heterocyclic group is substituted at the two adjacent positions with two alkyl groups, two alkoxy groups, an alkyl group and an alkoxy group, an alkyl group and an alkylthio group, an alkyl group and an alkylsulfonyl group, an alkyl group and a monoalkylamino group, or an alkyl group and a dialkylamino group, all selected from the substituent group ~ the two groups may form, together with the atoms to which they bond, a 5- to 8-membered ring which may be substituted with 1 to 4 halogen atoms; the hetero atom of the heterocyclic group, when it is a nitrogen atom, may be oxidized to become N-oxide; n is an integer of 0 to 2; wherein said substituent group e~ is selected from the group consisting of hydroxyl group; thiol group; halogen atoms; C1 to C10 alkyl groups; C1 to C10 alkyl groups each mono-substituted with a group selected from the following substituent group 13, C1 to C4 haloalkyl groups; C3 to C8 cycloalkyl groups; C1 to C10 alkoxy groups; C1 to C10 alkoxy groups each mono-substituted with a group selected from the following substituent group C1 to C4 haloalkoxy groups; C3 to C8 cycloalkyloxy groups; C3 to C8 cycloalkyl C1 to C3 alkyloxy groups; C1 to C10 alkylthio groups; C1 to C10 alkylthio groups each mono-substituted with a group selected from the substituent group 3'; C 1 to C4 haloalkylthio groups; C2 to C6 alkenyl groups; C2 to C6 alkenyloxy groups; C2 to C6 alkynyl groups; C2 to C6 alkynyloxy groups; C 1 to C 10 alkylsulfinyl groups; C 1 to C 10 alkylsulfinyl groups each mono-substituted with a group selected from the substituent group 3'; C 1 to C 10 alkylsulfonyl groups; C 1 to C 10 alkylsulfonyl groups each mono-substituted with a group selected from the substituent group 7; C1 to C4 haloalkylsulfinyl groups; C1 to C10 alkylsulfonyloxy groups each mono-substituted

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with a group selected from the substituent group 3,; C1 to C4 haloalkylsulfonyl groups; C1 to C10 alkylsulfonyloxy groups; C1 to C4 haloalkylsulfonyloxy groups; optionally substituted phenyl group; optionally substituted phenoxy group; optionally substituted phenylthio group; optionally substituted aromatic heterocyclic groups; optionally substituted aromatic heterocyclic oxy groups; optionally substituted aromatic heterocyclic thio groups; optionally substituted phenylsulfinyl groups; optionally substituted phenylsulfonyl groups; optionally substituted aromatic heterocyclic sulfonyl groups; optionally substituted phenylsulfonyloxy groups; acyl groups; C1 to C4 haloalkylcarbonyl groups; optionally substituted benzylcarbonyl group; optionally substituted benzoyl group; carboxyl group; C 1 to C 10 alkoxycarbonyl groups; optionally substituted benzyloxycarbonyl group; optionally substituted phenoxycarbonyl group; cyano group; carbamoyl group (its nitrogen atom may be substituted with same or different groups selected from C 1 to C 10 alkyl groups and optionally substituted phenyl group); C 1 to C6 acyloxy groups; C 1 to C4 haloalkylcarbonyloxy groups; optionally substituted benzylcarbonyloxy group; optionally substituted benzoyloxy group; nitro group; and amino group (its nitrogen atom may be substituted with same or different groups selected from C1 to C10 alkyl groups, optionally substituted phenyl group, C1 to C6 acyl groups, C1 to C4 haloalkylcarbonyl groups, optionally substituted benzylcarbonyl group, optionally substituted benzoyl group, C 1 to C 10 alkylsulfonyl group, C 1 to C4 haloalkylsulfonyl groups, optionally substituted benzylsulfonyl group, and optionally substituted phenylsulfonyl group); wherein said substituent group 13 is selected from the group consisting of hydroxyl group; C3 to C8 cycloalkyl groups (which

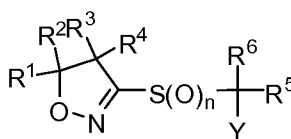
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may be substituted with halogen atom or alkyl group); C1 to C10 alkoxy groups; C1 to C10 alkylthio groups; C1 to C10 alkylsulfonyl groups; C1 to C10 alkoxycarbonyl groups; C2 to C6 haloalkenyl groups; amino group (its nitrogen atom may be substituted with same or different groups selected from C 1 to C10 alkyl groups, C1 to C6 acyl groups; C1 to C4 haloalkylcarbonyl groups, C1 to C10 alkylsulfonyl groups and C 1 to C4 haloalkylsulfonyl groups); carbamoyl group (its nitrogen atom may be substituted with same or different C1 to C10 alkyl groups); C1 to C6 acyl groups; C1 to C4 haloalkylcarbonyl groups; C1 to C10 alkoxyimino groups; cyano group; optionally substituted phenyl group; and optionally substituted phenoxy group; wherein said substituent group is selected from the group consisting of C1 to C10 alkoxycarbonyl groups; optionally substituted phenyl group; optionally substituted aromatic heterocyclic groups; cyano group; and carbamoyl group (its nitrogen atom may be substituted with same or different C 1 to C 10 alkyl groups); and

ii) at least one compound selected from the group consisting of atrazine, simazine, cyanazine, isoxaflutole, mesotrione, flumetsulam, imazethapyr, imazapyr, dicamba, clopyralid, prosulfuron, halosulfuron-methyl, rimsulfuron, bentazone, carfentrazone-ethyl, metribuzin, thifensulfuron-methyl, nicosulfuron, primisulfuron, cloransulam-methyl, glufosinate, glyphosate, glyphosate-trimesium, pendimethalin, linuron, prometryn, diflufenican, flumioxazin, and metolachlor wherein the herbicidal composition has a synergistic herbicidal effect in comparison to the herbicidal effect of the isoxaline derivative (i) and the compound (ii) alone.

***Determination of the scope and the content of the prior art  
(MPEP 2141.01)***

Nakatani et al. teach a herbicide containing, as an active ingredient, an isoxazoline derivative represented by the following general formula (I) or a salt



**Compound of formula (I)**

wherein R<sup>1</sup> and R<sup>2</sup> are independently a hydrogen atom, a C1 to C10 alkyl group, a C3 to C8 cycloalkyl group or a C3 to C8 cycloalkyl C1 to C3 alkyl group; or R<sup>1</sup> and R<sup>2</sup> may be bonded to each other to form a C3 to C7 spiro ring together with the carbon atoms to which they bond; R<sup>3</sup> and R<sup>4</sup> are independently a hydrogen atom, a C1 to C10 alkyl group or a C3 to C8 cycloalkyl group; or R<sup>3</sup> and R<sup>4</sup> may be bonded to each other to form a C3 to C7 spiro ring together with the carbon atoms to which they bond; or R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> may form a 5- to 8- membered ring together with the carbon atoms to which they bond; R<sup>5</sup> and R<sup>6</sup> are independently a hydrogen atom or a C 1 to C 10 alkyl group; Y is a 5- to 6-membered aromatic heterocyclic group or condensed aromatic heterocyclic group having one or more hetero atoms selected from a nitrogen atom, an oxygen atom and a sulfur atom; the heterocyclic group may be substituted with 0 to 6 same or different groups selected from the following substituent group when the

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heterocyclic group is substituted at the two adjacent positions with two alkyl groups, two alkoxy groups, an alkyl group and an alkoxy group, an alkyl group and an alkylthio group, an alkyl group and an alkylsulfonyl group, an alkyl group and a monoalkylamino group, or an alkyl group and a dialkylamino group, all selected from the substituent group ~ the two groups may form, together with the atoms to which they bond, a 5- to 8-membered ring which may be substituted with 1 to 4 halogen atoms; the hetero atom of the heterocyclic group, when it is a nitrogen atom, may be oxidized to become N-oxide; n is an integer of 0 to 2; wherein said substituent group is selected from the group consisting of hydroxyl group; thiol group; halogen atoms; C1 to C10 alkyl groups; C1 to C10 alkyl groups each mono-substituted with a group selected from the following substituent group 13, C1 to C4 haloalkyl groups; C3 to C8 cycloalkyl groups; C1 to C10 alkoxy groups; C1 to C10 alkoxy groups each mono-substituted with a group selected from the following substituent group ; C1 to C4 haloalkoxy groups; C3 to C8 cycloalkoxy groups; C3 to C8 cycloalkyl C1 to C3 alkyloxy groups; C1 to C10 alkylthio groups; C1 to C10 alkylthio groups each mono-substituted with a group selected from the substituent group 3/; C 1 to C4 haloalkylthio groups; C2 to C6 alkenyl groups; C2 to C6 alkenyloxy groups; C2 to C6 alkynyl groups; C2 to C6 alkynyloxy groups; C 1 to C 10 alkylsulfinyl groups; C 1 to C 10 alkylsulfinyl groups each mono-substituted with a group selected from the substituent group 3'; C 1 to C 10 alkylsulfonyl groups; C 1 to C 10 alkylsulfonyl groups each mono-substituted with a group selected from the substituent group 7; C1 to C4 haloalkylsulfinyl groups; C1 to C10 alkylsulfonyloxy groups each mono-substituted with a group selected from the substituent group 3,; C1

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to C4 haloalkylsulfonyl groups; C1 to C10 alkylsulfonyloxy groups; C1 to C4 haloalkylsulfonyloxy groups; optionally substituted phenyl group; optionally substituted phenoxy group; optionally substituted phenylthio group; optionally substituted aromatic heterocyclic groups; optionally substituted aromatic heterocyclic oxy groups; optionally substituted aromatic heterocyclic thio groups; optionally substituted phenylsulfinyl groups; optionally substituted phenylsulfonyl groups; optionally substituted aromatic heterocyclic sulfonyl groups; optionally substituted phenylsulfonyloxy groups; acyl groups; C1 to C4 haloalkylcarbonyl groups; optionally substituted benzylcarbonyl group; optionally substituted benzoyl group; carboxyl group; C 1 to C 10 alkoxycarbonyl groups; optionally substituted benzyloxycarbonyl group; optionally substituted phenoxycarbonyl group; cyano group; carbamoyl group (its nitrogen atom may be substituted with same or different groups selected from C 1 to C 10 alkyl groups and optionally substituted phenyl group); C 1 to C6 acyloxy groups; C 1 to C4 haloalkylcarbonyloxy groups; optionally substituted benzylcarbonyloxy group; optionally substituted benzoyloxy group; nitro group; and amino group (its nitrogen atom may be substituted with same or different groups selected from C1 to C10 alkyl groups, optionally substituted phenyl group, C1 to C6 acyl groups, C1 to C4 haloalkylcarbonyl groups, optionally substituted benzylcarbonyl group, optionally substituted benzoyl group, C 1 to C 10 alkylsulfonyl group, C 1 to C4 haloalkylsulfonyl groups, optionally substituted benzylsulfonyl group, and optionally substituted phenylsulfonyl group); wherein said substituent group 13 is selected from the group consisting of hydroxyl group; C3 to C8 cycloalkyl groups (which may be substituted with halogen atom or alkyl

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group); C1 to C10 alkoxy groups; C1 to C10 alkylthio groups; C1 to C10 alkylsulfonyl groups; C1 to C10 alkoxycarbonyl groups; C2 to C6 haloalkenyl groups; amino group (its nitrogen atom may be substituted with same or different groups selected from C 1 to C10 alkyl groups, C1 to C6 acyl groups; C1 to C4 haloalkylcarbonyl groups, C1 to C10 alkylsulfonyl groups and C 1 to C4 haloalkylsulfonyl groups); carbamoyl group (its nitrogen atom may be substituted with same or different C1 to C10 alkyl groups); C1 to C6 acyl groups; C1 to C4 haloalkylcarbonyl groups; C1 to C10 alkoxyimino groups; cyano group; optionally substituted phenyl group; and optionally substituted phenoxy group; wherein said substituent group T is selected from the group consisting of C1 to C10 alkoxycarbonyl groups; optionally substituted phenyl group; optionally substituted aromatic heterocyclic groups; cyano group; and carbamoyl group (its nitrogen atom may be substituted with same or different C 1 to C 10 alkyl groups) (see claims 1 and 18 of Nakatani et al.)

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Nakatani et al. is that the invention of the instant application claims a herbicidal composition comprising an additional known herbicidal active compound such as atrazine, simazine, cyanazine, isoxaflutole, mesotrione, flumetsulam, imazethapyr, imazapyr, dicamba, clopyralid, prosulfuron, halosulfuron-methyl, rimsulfuron, bentazone, carfentrazone-ethyl, metribuzin, thifensulfuron-methyl, nicosulfuron,

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primisulfuron, cloransulam-methyl, glufosinate, glyphosate, glyphosate-trimesium, pendimethalin, linuron, prometryn, diflufenican, flumioxazin, and metolachlor. For this reason, the teaching of Plant et al. is joined. Plant et al. teach herbicidal compositions comprising at least one herbicidally active isoxazole compound (see abstract, compound of formula I of Plant et al.) and co-components such as atrazine, cyanazine, simazine, prometryn, glyphosate, glufosinate, linuron, flumetsulam, isozafloofenuron, mesitrione, diflufenican, pendimethalin and flumioxazin (see pages 99 and 102).

***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of the cited references to arrive at a herbicidal composition which comprises an isoxazoline derivative represented general formula (I) or a salt thereof and another known herbicide such as atrazine, cyanazine, simazine, prometryn, glyphosate, glufosinate, linuron, flumetsulam, isozafloofenuron, mesitrione, diflufenican, pendimethalin and flumioxazin. Plant et al. teach herbicide combinations comprising a compound from the same class (isoxazoline) and the use of the same known herbicides (such as atrazine, cyanazine, simazine, prometryn, glyphosate, glufosinate, linuron, flumetsulam, isozafloofenuron, mesitrione, diflufenican, pendimethalin and flumioxazin). It is known in the art that combining herbicides increase the efficacy of a herbicide such that the maximum level of control or growth regulation for a given application rate of a herbicide is increased, or alternatively, the application rate of a



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herbicide giving optimum control or growth regulation can be reduced. One would have been motivated to combine these references in order to receive the expected benefit of an increase in the efficacy of the claimed isoxazoline herbicide. Thus, in view of *In re Kerkhoven*, 205 USPQ 1069 (C.C.P.A. 1980), it is *prima facie* obvious to combine two or more compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in prior art.

All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Therefore, the claimed invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because every element of the invention has been fairly suggested by the cited reference.

### ***Response to Arguments***

Applicant's arguments, filed April 27, 2009 with respect to the 103 rejection of claims 1 and 4-28 are rejected under 35 U.S.C. 103(a) over Nakatani et al. (US Patent 7,238,689 B2) in view of Ziemer et al. (US Patent Application 2003/0130120 A1) have been considered but are moot in view of the new ground(s) of rejection.

***Examiner's Response to Applicant's Declaration of Facts Filed Under 37***

***C.F.R. 1.132***

Applicant's Declaration Under 37 C.F.R. 1.132 filed on April 27, 2009 has not been considered because the data of tables X-1, X-2, and X-3 is missing and not of record. The declaration will be reconsidered when Applicant files the missing data.

The claims remain rejected.

***Conclusion***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electron Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am

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to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616